Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An essentially vinyl chloride-free suspension polymerization process for polymerizing styrene monomer, or a mixture of monomers comprising styrene, comprising the step of continuously or semi-continuously dosing an initiator selected from the group consisting of peroxydicarbonates, peroxycarbonates, peroxyesters, peroxyketals, diacylperoxides, dialkylperoxides, azo-initiators, ketone peroxides, which initiators may be functionalized, and mixtures thereof, from the point in time at which none of the monomer has been polymerized until at least 70% of all the monomer is polymerized, to the reaction mixture at the polymerization temperature, wherein at least one initiator that is dosed has a half-life of 60 minutes or less at said polymerization temperature.

2. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the ~~composition~~ mixture of monomers further comprises co-monomers selected from the group consisting of vinyl acetate, ethylene, propylene, acrylonitrile, butadiene, (meth)acrylates, and ethylenically unsaturated polymers~~, such as polybutadiene and styrene butadiene rubber~~.

3. (Currently Amended) ~~Process~~ The process according to claim 1, wherein said initiator is dosed continuously or semi-continuously from ~~the~~ a point in time at which at least 0.1~~%, more preferably at least 0.5%, most preferably 1~~% of the monomer has already been polymerized until at least 70%~~, preferably at least 80%, more preferably at least~~ 90%~~, and most preferably essentially all~~ of the monomer is polymerized~~, the term "essentially all of the monomer is polymerized" meaning that less than 1,000 ppm of monomer is present in the final polymerized product~~.

4. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the initiator is selected from the group consisting of substituted, or unsubstituted,

dibenzoylperoxides, 1,1-di(tert-butylperoxy)-3,3,5-trimethylcyclohexane, 2,2-di(tert-butylperoxy)butane, 1,1-di(tert-butylperoxy)cyclohexane, azo initiators, and mixtures thereof~~, most preferably from dibenzoylperoxide, 1,1-di(tert-butylperoxy)-3,3,5-trimethylcyclohexane, 2,2'-azobis(isobutyronitrile), 2,2'-azobis(2-methylbutyronitrile), and mixtures thereof.~~

5. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the reaction temperature is 170°C or lower~~, preferably 150°C or lower, more preferably 130°C or lower, and most preferably 120°C or lower~~.

6. (Currently Amended) ~~Process~~ The process according to claim 1, wherein at least part of the initiator is continuously or semi-continuously dosed over a period of at least 0.5 hour~~, preferably at least 1 hour~~.

7. (Currently Amended) ~~Process~~ The process according to claim 1, wherein at least 0.01 wt.%~~, more preferably at least 0.05 wt.%, and most preferably at least 0.1 wt.%~~ of the combined weight of all initiators and ~~preferably~~ at most 5 wt.%~~, more preferably at most 3 wt.%, and most preferably at most 1 wt.%~~ of the combined weight of all initiators, based on the weight of the monomers to be polymerized, is used.

8. (Currently Amended) ~~Process~~ The process according to claim 1, wherein a blowing agent is added or dosed to the reaction mixture when the degree of polymerization of the monomer is less than 80%~~, preferably less than 60%, and most preferably less than 50%~~.

9. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the initiator, or mixture of initiators, is dosed in the form of a~~, preferably aqueous,~~ dispersion.

10. (Currently Amended) ~~Process~~ The process according to claim 1, wherein an additional initiator is used to reduce the residual monomer level.

11. (Currently Amended) ~~Process~~ The process according to claim 10, ~~for the preparation of~~ wherein the process produces expandable polystyrene.

12. (Canceled)

13. (Canceled)

14. (New) The process according to claim 1, wherein the ethylenically unsaturated polymers are chosen from the group consisting of polybutadiene and styrene butadiene rubber.

15. (New) The process according to claim 3, wherein said initiator is dosed continuously or semi-continuously from a point in time at which at least 0.5% of the monomer has already been polymerized until at least 80% of the monomer is polymerized.

16. (New) The process according to claim 15, wherein said initiator is dosed continuously or semi-continuously from a point in time at which at least 1% of the monomer has already been polymerized until at least 90% of the monomer is polymerized.

17. (New) The process according to claim 16, wherein said initiator is dosed continuously or semi-continuously from the point in time at which at least 0.1% of the monomer has already been polymerized until less than 1,000 ppm of monomer is present.

18. (New) The process according to claim 5, wherein the reaction temperature is 150°C or lower.

19. (New) The process according to claim 18, wherein the reaction temperature is 130°C or lower.

20. (New) The process according to claim 19, wherein the reaction temperature is 120°C or lower.

21. (New) The process according to claim 6, wherein at least part of the initiator is continuously or semi-continuously dosed over a period of at least 1 hour.

22. (New) The process according to claim 7, wherein at least at least 0.05 wt.%, of the combined weight of all initiators and at most 3 wt.% of the combined weight of all initiators, based on the weight of the monomers to be polymerized, is used.

23. (New) The process according to claim 22, wherein at least at least 0.1 wt.% of the combined weight of all initiators and at most 1 wt.% of the combined weight of all initiators, based on the weight of the monomers to be polymerized, is used.

24. (New) The process according to claim 8, wherein a blowing agent is added or dosed to the reaction mixture when the degree of polymerization of the monomer is less than 60%.

25. (New) The process according to claim 24, wherein a blowing agent is added or dosed to the reaction mixture when the degree of polymerization of the monomer is less than 50%.

26. (New) The process according to claim 9, wherein the initiator, or mixture of initiators, is dosed in the form of an aqueous dispersion.

27. (New) The process according to claim 4, wherein the initiator is selected from the group consisting of dibenzoylperoxide, 1,1-di(tert-butylperoxy)-3,3,5-trimethylcyclohexane, 2,2'-azobis(isobutyronitrile), 2,2'-azobis(2-methylbutyronitrile), and mixtures thereof.